ABSTRACT

ANALYSIS OF ADVERSE DRUG EVENT OF β-LACTAM AND NON β-LACTAM ANTIBIOTIC IN PEDIATRIC WARD OF DR.SOETOMO HOSPITAL SURABAYA

Background - The adverse drug events is the noxious respons that arise in patients. Children are the most vulnerable subject to adverse event. Antibiotics are the most commonly prescribed drugs in children. There is a lack of local data regarding the potential risk of adverse drug in hospitalized pediatric patients.
Objective - The aim of this study was to analyze the adverse drug events caused by beta-lactam antibiotics and non beta-lactam in pediatric patients undergoing treatment in the paediatric ward of Dr. Soetomo Hospital
Methods- This study was a prospective study with cross sectional aproach for children that hospitalized in tropical ward. This study has been approved by the ethics committee of Dr. Soetomo Hospital Surabaya. The data collection was conducted from July to September 2018.
Result – From 96 patients (54 male and 42 female) invoved in this study, 19 (19,8%) experienced side effect which consist of 9 boys (9,4%) and 10 girls (10,4%). Toddlers aged 0-5 years old were 14 people (14,6%) and the age group 6-18 years was 5 people (5,2%). The total use of antibiotics were 102 beta lactam (75.6%) and 33 (24.4%) of non beta lactam. The side effect events that occurred in beta lactam and non betalactam not significantly different (p = 0.223). Risk factors included gender (p = 0.429), history of allergies (p = 0.46) and age (p = 0.730) were also not significantly difference. The side effect showed Possible (66.7%), Probable (23.8%), Definite (4.8%) and Doubtful (4.8%).
Conclusion The adverse drug events in the use of beta lactam groups with the types such as fever, red itchy skin, red rash, abdominal pain, chest tightness and phlebitis, and in non beta lactam with the incident of rash. Risk factors for sex, age, and history of allergies are clinically different but not significant. The Naranjo analysis of adverse drug events shows that the biggest incidents is *Possible* adverse drug events.
Keywords: *Antibiotic, Pediatric, Side effect*